03 Jun 02

DEPARTMENT OF THE AIR FORCE
Air and Space Basic Course (AETC)
Maxwell Air Force Base, Alabama 36112

LESSON PLAN

A1330, RAPID GLOBAL MOBILITY

CONTENTS

RECORD OF CHANGES

CHANGE NUMBER	REMARKS
New Lesson Plan	Supercedes ABC lesson A1320 dated 27 Aug 01

SUMMARY OF CHANGES

EDUCATIONAL GOALS

A1000 Area Objective: Apply aerospace power capabilities and officership principles to warfighting.

A1300 Phase Objective: Comprehend how the Air Force Core Competencies enhance warfighting.

A1330 – RAPID GLOBAL MOBILITY

Lesson Objective 1: Know the historical development of the USAF Core Competency of Rapid Global Mobility.

Samples of Behavior:

(R/S) 1.1 - Identify historical examples of Rapid Global Mobility.

(R/S) 1.2 - Define the USAF Core Competency of Rapid Global Mobility.

Lesson Objective 2: Comprehend the significance of selected historical events in the development of the USAF Core Competency of Rapid Global Mobility.

Samples of Behavior:

(R/S) 2.1 - Explain the significance of the Berlin Airlift in the development of the USAF Core Competency of Rapid Global Mobility.

(R/S) 2.2 - Explain the significance of Operation NICKEL GRASS in the development of the USAF Core Competency of Rapid Global Mobility.

Lesson Objective 3: Comprehend how the USAF Core Competency of Rapid Global Mobility contributes to aerospace operations.

Sample of Behavior:

(R/S) 3.1 - Explain the role of the USAF Core Competency of Rapid Global Mobility in the application of aerospace power.

Lesson Description: In this lesson, students discuss the importance of Rapid Global Mobility as one of the six Air Force Core Competencies. Students also discuss Rapid Global Mobility from two historical perspectives: The Berlin Airlift and Operation NICKEL GRASS. This lesson explores the impact of Rapid Global Mobility on aerospace operations and how this Core Competency relates to the Airman's perspective of military operations.

Prerequisites: None

Preparation: Read A1330, Rapid Global Mobility.
Read AFDD 1, pp. 33-34

Optional: N/A

Rationale/Linkage: The A1300 Phase of instruction focuses on the Air Force Core Competencies. According to AFDD 1, "Core competencies are at the heart of the Air Force's strategic perspective and thereby at the heart of the Service's contribution to our nation's total military capabilities. . . whether as a single Service or in conjunction with the core competencies of other Services in joint operations" (27). Students must understand the Air Force Core Competencies is required before a study of Joint Air Operations Planning (A1600 Phase) can commence. This particular lesson gives students a thorough understanding of Rapid Global Mobility, which is one of the six Air Force Core Competencies.

INSTRUCTIONAL PLAN

1. **TITLE AND LENGTH OF SEMINAR:** Rapid Global Mobility (1:00)

2. **RELATION TO OTHER INSTRUCTION:** The A1300 Phase of instruction focuses on the Air Force Core Competencies. According to AFDD 1, "Core competencies are at the heart of the Air Force's strategic perspective and thereby at the heart of the Service's contribution to our nation's total military capabilities. . . whether as a single Service or in conjunction with the core competencies of other Services in joint operations" (27). Students must understand the Air Force Core Competencies before a study of Joint Air Operations Planning (A1600 Phase) can commence. This particular lesson gives students a thorough understanding of Rapid Global Mobility, which is one of the six Air Force Core Competencies.

3. **GENERAL METHOD OF INSTRUCTION:**

   a. Presentation Method: Guided discussion

   b. Time Outline:

Segment Time	Total Time	Description
0:10	(0:10)	Introduction
0:10	(0:20)	MP I: Rapid Global Mobility
0:25	(0:45)	MP II: Historical Examples 1. Berlin Airlift 2. Operation NICKEL GRASS
0:10	(0:55)	MP III: Current and Future Application
0:05	(1:00)	Conclusion

   c. Instructor Preparation:

- Review the lesson plan.
- Read A1330, Rapid Global Mobility.
- Review AFDD 1, pp. 33-34.

d. Instructional Aids/Handouts:

- None

e. Student Preparation:

- Read A1330, Rapid Global Mobility.
- Read AFDD 1, pp. 29-30.

f. Strategy: This lesson is a guided discussion. The instructor should get the students' attention by introducing what an Air Force leader thinks about Rapid Global Mobility. During the motivation step, show the video clip that will describe the importance of Rapid Global Mobility. Begin with the knowledge-based questions about the USAF core competency of Rapid Global Mobility. Use the historical examples to emphasize the key points in the definition of Rapid Global Mobility and bring out how the principles of war and the air and space power functions contributed to Rapid Global Mobility in those examples. Next, get the students to discuss Rapid Global Mobility as it applies to them, both as ASBC students and as AF officers. Finally, wrap up the lesson by hitting the lesson objectives again and reminding them of the "so what." Core competencies are the basic areas of expertise that the Air Force brings to the fight. Airmen must be able to master these core competencies if they are to employ aerospace power properly.

g. References: N/A

4. **DETAILS OF INSTRUCTION**:

a. Introduction: 0:10 (0:10)

1) //Attention//

Gen Fogleman presented an interesting viewpoint on the importance of this Core Competency.

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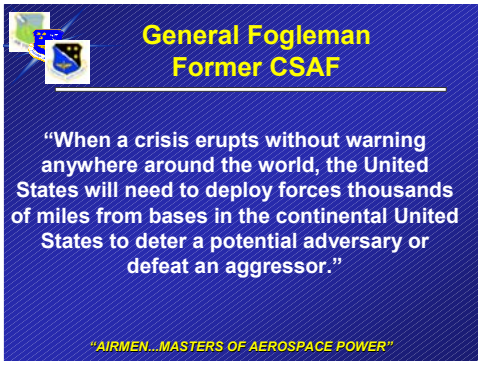

2) //Motivation//

Today, we are an expeditionary force that relies on the ability to move massive amounts of equipment and personnel on a moment's notice to any crisis anywhere in the world. The unique capability of the USAF to accomplish this task is our topic of discussion for today. Rapid Global Mobility is very important to our national security and the achievement of our national goals, and through our analysis of this Core Competency, we'll see why this is the case.

3) //Overview//

[SLIDE]

Today, we're going to examine rapid global mobility and its role in the application of aerospace power. First, we will look at Rapid Global Mobility from a doctrinal perspective. We will look into how our doctrine defines Rapid Global Mobility and the process for accomplishing it. We will then examine two historical examples to better understand where that doctrine came from. We will also be able to apply these definitions to get a better idea of what Rapid Global Mobility is. Finally, we will look at our current situation, both as an ASBC flight and as an Air Force, and examine how Rapid Global Mobility applies today.

(TRANSITION): NOW THAT WE KNOW WHAT WE'LL BE TALKING ABOUT, LET'S DISCUSS EXACTLY WHAT RAPID GLOBAL MOBILITY IS.

b. MP I: Rapid Global Mobility: 0:10 (0:20)

***{Instructor note**: All of the quotations in MP1 are from AFDD 1}*

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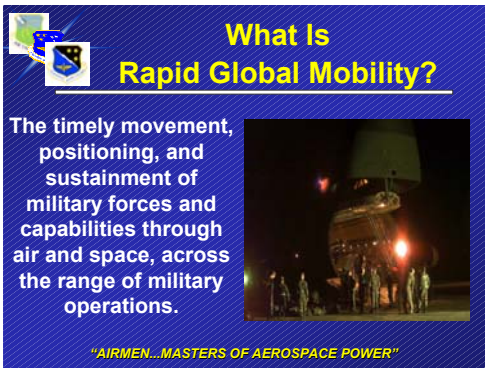

LEAD OFF QUESTION (LOQ): WHAT IS RAPID GLOBAL MOBILITY?

ANTICIPATED RESPONSE (AR): Rapid Global Mobility "refers to the timely movement, positioning, and sustainment of military forces and capabilities through air and space, across the range of military operations."

[SLIDE] (for definition)

Because of budget cuts and military drawdowns, "global mobility has increased in importance to the point where it is required in virtually every military operation." Since the end of the Cold War, the threats to US interests have spread across the globe and are now found in a variety of sizes, shapes, and locations.

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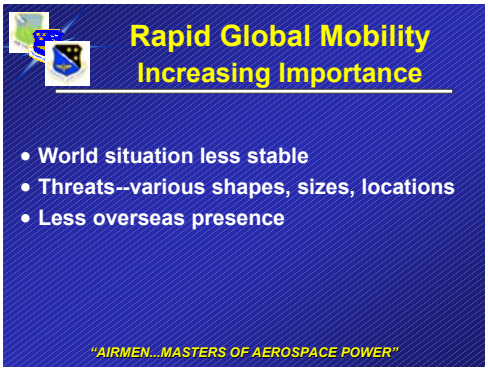
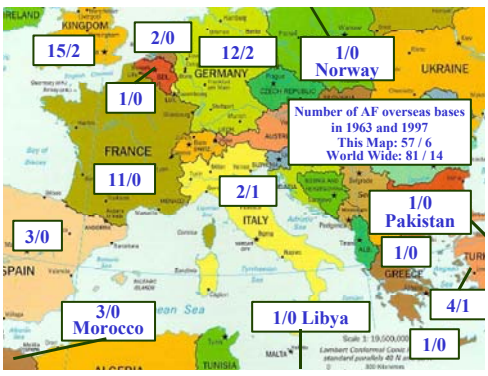


Since the US no longer has massive numbers of forward-deployed bases around the world, the need for rapid power projection is critical. The following slide shows the level of drawdown that has occurred since 1963.

[SLIDE]



FUQ: WHAT MAKES THIS CORE COMPETENCY UNIQUE FROM OUR SISTER SERVICES' MOBILITY FUNCTIONS?

AR: Although other services can move personnel and equipment from one point to another, and, in the case of the Navy, usually with more lift capacity, "it is the particular competence of air and space forces to most rapidly provide what is needed…where it is needed."

FUQ: HOW DO WE ACHIEVE RAPID GLOBAL MOBILITY?

AR: Air and space power is employed through the air and space power functions. When we think of Rapid Global Mobility, the predominant air and space power functions are airlift and spacelift.

[SLIDE]

Airlift can be classified in three ways:

- **Inter**theater provides the "air bridge" between the US and other theaters--or, from one base in the US to another
- **Intra**theater provides the air movement of personnel and material within a CINC's area of responsibility
- "Operational support airlift" is usually available only for the requirements of the organization to which they are assigned.

There are three types of spacelift:

- "Launch to Deploy" includes launches to achieve initial operational capability of a new satellite system.
- "Launch to Sustain" includes launches to replace satellites that are predicted to fail--or those that fail abruptly.

- "Launch to Augment" includes launches to increase operational capability in response to contingency requirements, crisis, or war.

***{Instructor note**: Have the students discuss in more detail how they think these other functions could be used in the attainment of Rapid Global Mobility. For instance: Air refueling is required to achieve global distances. OCA/DCA is necessary to protect airlifters. Weather Services are needed for flight planning, etc.}*

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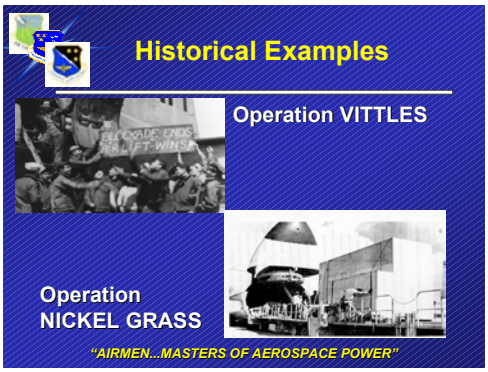


(TRANSITION): WHETHER THROUGH COMBAT, PEACEKEEPING, OR HUMANITARIAN OPERATIONS, RAPID GLOBAL MOBILITY HAS PROVEN TO BE A VITAL INSTRUMENT OF NATIONAL POLICY. OPERATION VITTLES AND OPERATION NICKEL GRASS ARE TWO HISTORICAL EXAMPLES OF HOW THIS CORE COMPETENCY DID JUST THAT. WITH THAT IN MIND, LET'S DISCUSS OPERATION VITTLES

c. MP II: Historical Examples: 0:25 (0:45)

Operation VITTLES:

[SLIDE]

LOQ: WHAT WAS OPERATION VITTLES?

AR:

- Airlift operation providing food and coal to two million West Berliners to counter the Soviet blockade of ground transportation lines

FUQ: WHAT WERE THE OBJECTIVES (ALLIED AND SOVIET)?

AR:

- Allied - to keep Soviets from starving the people of West Berlin and prevent them from turning the city into a communist society
- Soviet - to starve the West Berliners and promote Communist rule

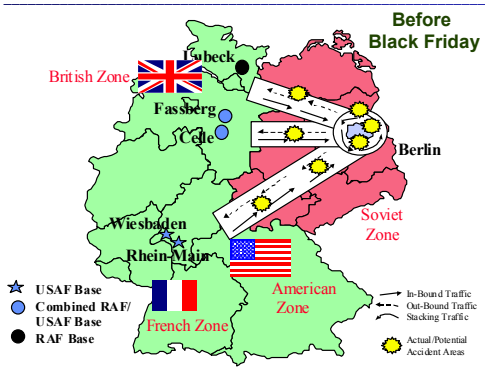
FUQ: WHAT WERE THE KEY PROBLEMS THE ALLIED AIRLIFTERS FACED?

[SLIDE]

AR: During the Berlin Airlift, all of the cargo flights were allowed to enter and exit Berlin only through the three corridors shown here. The Soviet Union would consider any deviation from these narrow corridors as a violation of East German airspace. The amount of air traffic created severe problems: Air traffic controllers had to assure safe separation of aircraft in the air, and ground controllers had to make sure that enough ramp space was available to accommodate all of the aircraft. Adding to the confusion, at first, there was two-way air traffic in each of the corridors, and any aircraft that couldn't land in Berlin was confined to the only tiny twenty-mile area available for holding patterns.

FUQ: WHAT HAPPENED ON "BLACK FRIDAY" (13 AUGUST 1948) THAT INSPIRED GENERAL TUNNER TO SOLVE THIS PROBLEM, ONCE AND FOR ALL?

[SLIDE]



AR:

- While flying to Berlin, Tunner's airplane was caught in a bad thunderstorm. Severe weather struck Templehof quickly and disabled radar systems
- Templehof was in chaos
  - One pilot tried to land, but overshot the runway, crashed, and burned
  - Another pilot braked hard to avoid the inferno and blew his tires, blocking the runway--a third pilot ground-looped on the auxiliary runway
  - Another pilot couldn't find the runway at all and landed at a nearby construction site
  - Several aircraft and crewmen were lost
- Air traffic controllers sent all aircraft to a tiny, twenty mile holding pattern over West Berlin. If they strayed from this tiny zone, they'd become tempting bait for Russian fighters or antiaircraft fire
- Every 3 minutes, new-arrivals were stacked on top of the holding pattern

- Tunner told the air traffic controllers to send every plane in the stack back to its home base. Then, he tasked his two crewmen to find a way to prevent that situation from ever happening again

FUQ: HOW DID THEY SIMPLIFY THE TRAFFIC PATTERNS IN THE AIR CORRIDORS, AND OVER BERLIN?

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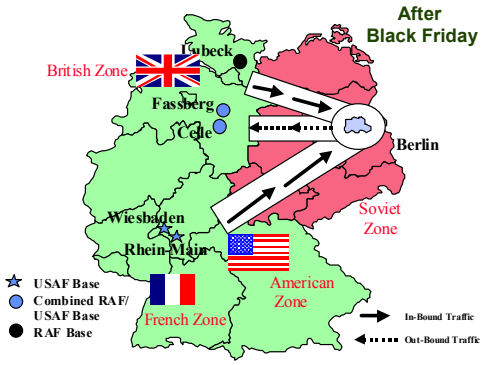


AR:

- They established effective and efficient one-way traffic in the corridors
  - Inbound flights used the outer (northernmost and southernmost) corridors
  - All outbound flights exited via the middle corridor
  - Also, any inbound aircraft experiencing mechanical trouble would continue to Berlin, but would immediately be sent to the outbound corridor--they had no time for complicated landings, and they had no room for broken aircraft on the flightline
  - These simple changes virtually eliminated any chance of mid-air collisions between traffic flying in opposite directions
- They also abolished airplane stacking: If an aircraft couldn't land on the first approach, it would have to fly back to its home base <u>with</u> its cargo

FUQ: WHY WAS OPERATION VITTLES IMPORTANT?

AR:

- It demonstrated the importance of Rapid Global Mobility to humanitarian operations
- Without Allied support, the West Berliners might have suffered starvation, and the Soviets might have gained control of the city
- It showed our resolve--without having to resort to combat

[SLIDE] (AUTOMATIC SOUND CLIP, THEN PICTURES WILL APPEAR)

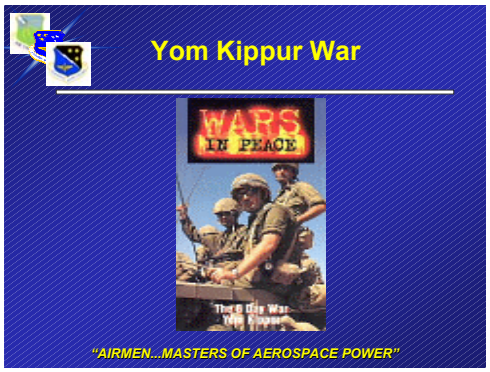
(TRANSITION): AS GENERAL TUNNER PREDICTED, THE FUTURE WAS IN THE BIG AIRCRAFT. LET'S EXAMINE HOW THAT CONCEPT APPLIED TO OPERATION NICKEL GRASS.

LOQ: WHAT WAS OPERATION NICKEL GRASS?

AR:

- Airlift operation in which supplies were flown to Israel from the continental United States (CONUS) to support Israel during the Yom Kippur War (which began on 6 Oct 1973)

[SLIDE]



FUQ: WHAT WERE THE ARAB, ISRAELI, AND AMERICAN OBJECTIVES?

AR:

- On 6 Oct 73, Arabs launched a surprise attack to take back the Suez Canal and Golan Heights, which they lost to Israel during the Six Day War in 1967

- Israel strove to survive the Arab surprise attack and retain their territory
- The United States sought to supply Israel with war materiel

FUQ: WHAT WERE THE POTENTIAL RISKS OR CHALLENGES ASSOCIATED WITH THIS OPERATION?

AR:

- If US support proved insufficient and Israel lost the war, the Cold War balance of power could have shifted in favor of the Soviet Union
- Potential for another world war
- Possible OPEC restrictions (i.e., oil embargo)--this did come to pass
- Our airlifters crossed southbound path of Soviet transports supplying Egypt and Syria--there was a threat of engaging hostile aircraft
- We were denied over-flight privileges and couldn't use NATO bases

[SLIDE]

Because the US was not allowed to stage operations out of our NATO bases, all flights supporting the Israelis during Operation NICKEL GRASS had to be flown out of the US. We did get one break: Despite the threats of OPEC restrictions, Portugal granted us the use of Lajes Field in the Azores. This slide shows the route that our transports were forced to fly.

[SLIDE]

This slide shows how the carefully-planned route avoided other nations' air space.

FUQ: WHAT WERE THE RESULTS?

AR:

- 567 missions airlifted 22,318 short tons over a distance of 6,450 miles
- Israel received a psychological boost, went on the offensive, and preserved their security

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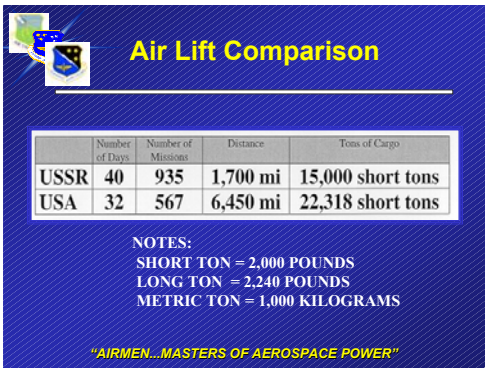


Take a look at this comparison of US airlift support to Israel in Operation NICKEL GRASS versus the Soviet airlift support to the Arabs: Notice that we flew fewer days than the Soviets did, and we flew far fewer missions, too--only about 60% of the total number of Soviet missions. We also had to fly over three and a half times as far as the Soviets did. Even so, we supplied **almost 50% more** than the Soviets did, in total tonnage. These results clearly demonstrate that even at this earlier stage in the development of the Air Force Core Competency of Rapid Global Mobility, the US was much more capable of accomplishing a complex airlift mission than the other Cold War superpower--the Soviet Union--was.

FUQ: WHY WAS OPERATION NICKEL GRASS IMPORTANT?

AR:

- It demonstrated the importance of Rapid Global Mobility in supporting modern combat operations--even those of our allies--in the same way the Berlin Airlift demonstrated the importance of Rapid Global Mobility in supporting humanitarian operations
- Without that support, Israel could have suffered defeat, and its existence as an independent nation would have been at stake
- It re-emphasized the value of air mobility forces--we responded to threats to our national interests without placing troops in harm's way

d. MP III: Current and Future Application: 0:10 (0:55)

[SLIDE]

LOQ: HOW DID YOU SEE RAPID GLOBAL MOBILITY APPLIED IN AFEX?

AR: AFEX did not integrate intertheater airlift to resupply bases, but we can assume intratheater airlift occurred because precision-guided munitions were "spread" evenly across the bases. AOC communications with aircraft probably were conducted via satellite, so the we could claim there were spacelift operations in this exercise.

FUQ: HOW DO YOU THINK RAPID GLOBAL MOBILITY WILL BE USED IN AIRGAP?

AR:
*{**Instructor note:** Since this exercise is a future event, the discussion will probably be a little less detailed than the discussion on AFEX, but the students should be able to relate the general idea of using Airlift and Spacelift within the parameters of the exercise.}*

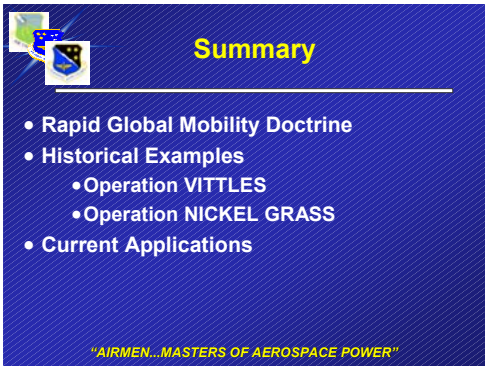
FUQ: HOW DO YOU THINK YOU WILL CONTRIBUTE TO RAPID GLOBAL MOBILITY IN YOUR AF JOB?

AR:
*{**Instructor note:** Generally, students should be able to relate how they contribute to the core competency of Rapid Global Mobility within their career fields and/or how Rapid Global Mobility would be required for them to do their jobs. For example: Comm can't set up a network at PSAB without parts from the US, we would not be able to provide food and medicine to refugees without Rapid Global Mobility, etc}*

e. Conclusion: 0:05 (1:00)

1) //Summary//

[SLIDE]



We've just taken a thorough look at Rapid Global Mobility. We discussed the definition of this Core Competency and its key attributes. We then discussed Operation VITTLES and Operation NICKEL GRASS, each of which demonstrated the vital role of Rapid Global Mobility and the problems we have faced getting to where we are today. Finally, we looked at Rapid Global Mobility as it applies to us as an ASBC flight and as an Air Force.

2) //Remotivation//

We've heard it said time and time again: "You can't fight if you can't get there." It doesn't matter what kind of Joint force we have if we can't get it where it needs to be. Rapid Global Mobility provides the US Air Force the ability to do just that. As you prepare to move on into the wargaming exercises (such as Lesson A1250, AFEX; Lesson A1380, AIRGAP; and the A1700 Phase--Blue Thunder) you need to keep this lesson and all of the Air Force Core Competencies at the forefront, as you plan your operations.

3) //Closure//

[SLIDE]

I think this comment from General Fogleman, former Chief of Staff of the Air Force, sums up Rapid Global Mobility best.